

Claims

1. A telescopic mechanism, especially for steering columns of motor vehicles, with an internal element (10), which has a flattening (12) at least on one side, and an external element (14), which is complementary to the internal element (10) and in which the internal element is guided with roll barrels, which roll at the flattening (12), wherein at least some of the roll barrels are constructed as hollow elasticity bodies (18; 32; 36; 40).
2. The telescopic mechanism of claim 1, wherein the hollow bodies are helical springs (18).
3. The telescopic mechanism of claim 2, wherein the helical springs (18) are tensile springs, the coils of which, in the unstressed state, lie against one another on block.
4. The telescopic mechanism of claims 2 or 3, wherein the helical springs (18) are formed from a spring steel with a rectangular cross section.
5. The telescopic mechanism of claim 1, wherein the hollow bodies are hollow cylinders (32; 36; 40).
6. The telescopic mechanism of claim 5, wherein the hollow cylinders (32; 36; 40) are formed by rolling up a blank (32a; 36a; 40a) in such a manner, that the ends of the blank abut one another with formation of a seam (34; 38; 42).
7. The telescopic mechanism of claim 6, wherein the seam (34; 38; 42) extends obliquely to the axis of the hollow cylinder.

8. The telescopic mechanism of claim 7, wherein the seam (34; 38) extends around the hollow cylinder at least once.

9. The telescopic mechanism of one of the preceding claims, wherein the internal element (10) has a polygonal external cross section and forms several flattenings (12), which are supported in each case over a set of hollow bodies (18) at a corresponding flattening (16) of the inner cross section of the external element (14).

10. The telescopic mechanism of one of the preceding claims, wherein the hollow bodies (18) are held in a cage (20), which fills the space between the internal element (10) and the external element (14) with little clearance and forms the boundary for the deformation of the external cross section of the helical springs (18).

11. The telescopic mechanism of claims 9 and 10, wherein the cage (20) forms several thickened sections (22) which in each case are assigned to a flattening (12) of the internal element (10) and accommodate a set of hollow bodies (18) and are connected with one another by flexible cross members (24).

12. The telescopic mechanism of claim 11, wherein the cage (20) is an injection-molded part, which is produced as a stretched tape and can be bent at the cross members (24) into a shape corresponding to the external cross section of the internal element (10).

13. The telescopic mechanism of one of the preceding claims, wherein a solid cylindrical roll (30), which supports the inner surface of the hollow body (18) with clearance and limits the elastic deformation of the outer cross section of the hollow body, is inserted into at least one of the hollow bodies (18).